Invasive Plants in Pennsylvania Smallflower and Hairy Willow-herbs

Epilobium parviflorum and Epilobium hirsutum



Hairy willow-herb; Leslie J. Mehrhoff, University of Connecticut

Background:

Originally planted in the United States as an ornamental, hairy willow-herb eventually became a common garden weed. It was first recorded in Newport, Rhode Island in 1829, and may have made landfall as a hitchhiker in ship ballast water. After its arrival in coastal areas, it spread rapidly inland. Little information is known on smallflower willow-herb's background. **Range:**

A native of Eurasia and North Africa, these nonnative willow -herbs have spread to Australia and North America. Hairy willow-herb is found mostly in the Northeast and Great Lakes regions, as well as scattered locations in the Northwest. Smallflower willow-herb is found in Michigan, Ohio, and Pennsylvania.



Description:

Both of these nonnative willow-herbs are herbaceous perennials with pubescent stems. The lance-shaped leaves are sessile, clasping the stem at their base. Showy, rosecolored flowers, each with four notched petals, precede long, narrow seed pods. The pods eventually split to release numerous seeds with long, white hairs.



Hairy willow-herb; Richard Old, XID Services, Inc.

Habitat:

This semi-aquatic herb is found in a wide range of moist, open habitats, including wetlands, ditches, stream banks, low fields and meadows. Once established, hairy willow-herb is somewhat shade-tolerant; some reports indicate smallflower willow-herb is less tolerant of shade.

Biology and Spread:

Hairy willow-herb spreads primarily by its thick, branching rhizomes. Its rhizomes are capable of developing aerenchymal tissue, allowing it to grow submerged in water. Both willow-herbs are also spread by seeds that can blow on the wind or attach to wildlife fur or feathers.

Ecological Threat:

This invasive is aggressive, and can quickly form dense, monotypic stands in wetlands, pushing out native species. Hairy willow-herb easily spreads to undisturbed areas. Its colonies impede hydrology in waterways and wetlands. It often co-exists with purple loosestrife (*Lythrum salicaria*).



Smallflower willow-herb; http://www.plant-identification.co.uk

How to Control this Species:

Physical

Small infestations can be dug up, bagged and disposed of in the trash. Try to remove as many of the rhizomes and root fragments as possible. Sites must be checked for regrowth. Off-site composting is not recommended. To prevent seed production, mature flowering stems can be cut at the base in late summer or early fall. Black plastic covering may be used as an interim option to slow growth of dense seedling infestations.

Look-A-Likes:

Other native willow-herbs can appear similar, so identification should be confirmed prior to control efforts. Our native fireweed (*Chamerion angustifolium*) could potentially be mistaken for hairy willow-



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Chemical

Be sure to use an herbicide that is approved for use in aquatic habitats. Follow all label directions and local herbicide regulations. Some willowherbs have shown varying levels of herbicide resisstance.

Prevention

Check boat hulls, motors and other equipment for plant fragments if recreating in areas infested with hairy willow-herb. These can be transported to new areas.



Richard Old, XID Services, Inc. www.forestryimages.org

References:

Center for Invasive Species and Ecosystem Health: <u>http://www.invasive.org/browse/subinfo.cfm?sub=5585</u>

King County Noxious Weed Control Program: http://your.kingcounty.gov/dnrp/library/water-and-land/ weeds/Brochures/Hairy-Willowherb-Fact-Sheet.pdf

For More Information:

DCNR Invasive Species Site: <u>http://www.dcnr.state.pa.us/</u> conservationscience/invasivespecies/index.htm

DCNR Invasive Exotic Plant Tutorial for Natural Lands Managers: http://www.dcnr.state.pa.us/forestry/invasivetutorial/ hairy_willow_herb.htm